

Refuse & Recycling Collection Route & Service Management

October 2019 to present

Buyer and Key Parties

Buyer

City of Kansas City, Solid Waste
Department

Key Features

- Cloud-based system with dashboards that bolts on to existing systems
- Route optimization
- Real-time route information through moving map display
- Searchable customer data
- Integration with 311, Bulky Waste Scheduling App, CRM, GIS
- Near real time vehicle tracking including speed & route progress
- Idle times, break times, automatic service confirmation, number of pickups by user ID
- Exception management documentation including picture/video using in-cab tablets
- Communications between the unit in the vehicle & office staff
- Management tools including open tickets
- Comprehensive reporting & audit system

Issues Solved

The City of Kansas City wanted to increase efficiency in its solid waste collection operation through automatic service confirmations, enabling drivers to capture data at the curb, optimizing routes, providing real time vehicle tracking, reducing fuel use and minimizing overall costs. The City also sought to improve customer service in areas historically serviced by contractors, where customer complaints about missed garbage service were rising rapidly.

Solution Overview

Rubicon's technology was deployed on 80 vehicles in the solid waste department beginning in October 2019. This allowed the city to optimize scheduling and routing, provide real time updates to drivers - improving customer service and handle the integration of Bulky Waste through the same management and scheduling

Outcomes and Benefits

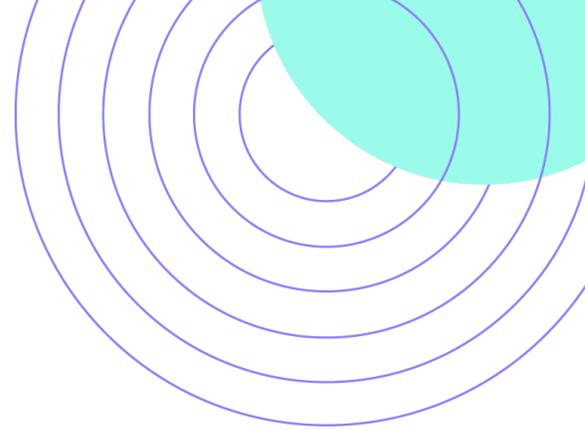
- Doubling service area covered by those 80 vehicles
- Cost savings through streamlined operations and optimized routing
- Improved service delivery to residents and response time to requests or missed pickups
- Enable drivers to flag issue in real time, onsite
- Improved tracking, reporting and communications for internal teams

Solution Description

In July 2018, the City issued a solicitation to provide a turnkey solution to deploy across their solid waste fleet. After a competitive process, the City selected Rubicon as its technology provider.

The deployment was launched in October 2019 including 2 pieces of hardware: 1) a pod device that plugs into the truck's OBD-II port, and 2) an iPad tablet that the drivers take with them each day.

In the target service area, the city had multiple contractors and a history of below target service levels. With this program, they took over collection from the contractors with multiple goals: Expand Service Area, Optimize Service, Improve Customer Service / Response.



Documents

[KCMO- Rubicon Executed Contract](#)

RFP Questions & Rubicon Response in Appendix D of contract

Other Solution Deployments

Atlanta, Georgia
Montgomery, Alabama
Santa Fe, New Mexico
Spokane, Washington
West Memphis, Arkansas

Who should use this solution

Fleet Managers
Public Works Departments
Sanitation Departments

Contacts

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Some of the highlights of the deployment in Kansas City include:

- **Real-time updates to and from the drivers:** Rubicon’s solution gives dispatchers and supervisors real-time updates from the field, allowing them to provide faster customer feedback and re-route drivers as needed.
- **Scheduling and optimizing Bulky Waste collection:** The integration between Rubicon and the City’s Bulky Waste scheduling application allows dispatchers to quickly create optimized routes for the day’s bulky pickups and assign them to routes. It also enables automatic service confirmations and allows drivers to flag any issues at the curb using the tablet.
- **Fleet optimization:** The City is more than doubling its service areas as it takes over garbage and recycling collection from two contractors. Together, Rubicon and the City will optimize recurring residential waste and recycling routes for this new, expanded service territory.

Rubicon’s solution enabled this by providing all the required hardware in the vehicle and an integrated software solution. Rubicon provided the city with installation, training, integration, support and maintenance as part of the solution. The solution also works with the City’s ESRI GIS mapping and can be integrated into other systems, like 311.

Contract Details and Pricing

Rubicon operates a Software-as-a-Service model, meaning the customer receives all the necessary hardware, software and services. Pricing below is based on Tablets + Pods for 80 vehicles; 50 daily routes; 3 services (MSW, Recycling, and Yard Waste); 151k service locations. If the number of customers, routes, or trucks changes by more than 10%, there may be revised per vehicle pricing.

Functionality included: service confirmations, route management, vehicle tracking, individual route optimization, turn by turn directions, 125 hours of software integration time.

Type	Cost	Term (in Years)	Total Cost
Recurring Annual Cost <i>(includes hardware / software, implementation and setup)</i>	\$316,667	3	\$950,000

All costs include contracted training and support. Additional Integration support has a fixed rate of \$200 per hour.

